

# Update on Boulder Energy Future

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# Agenda

I ..... Background

II ..... PUC Application

III ..... Out-of-City Customers

IV ..... What We Have Learned

V ..... Status and Next Steps

# What Boulder is Doing and Why

- Boulder has created a municipal utility
- Only alternative at this time to achieve community goals
  - Boulder has a goal of attaining 80% reduction in greenhouse gases by 2050
  - Control over the distribution system is only way to access alternative power and improve resilience and reliability

# Colorado Regulatory Structure

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- Traditional vertically integrated utilities
- No competition
- Access to market power not allowed
- Primarily served by one large IOU (PSCO/Xcel)
- PUC regulation



# What We Can't Do Today

- Control the carbon intensity of our energy portfolio
- Determine the strategic investments in our grid infrastructure to support distributed generation, microgrids, etc.
- Support innovative products and services to the home and energy system that are not behind the meter
- Significantly increase the resilience of our system

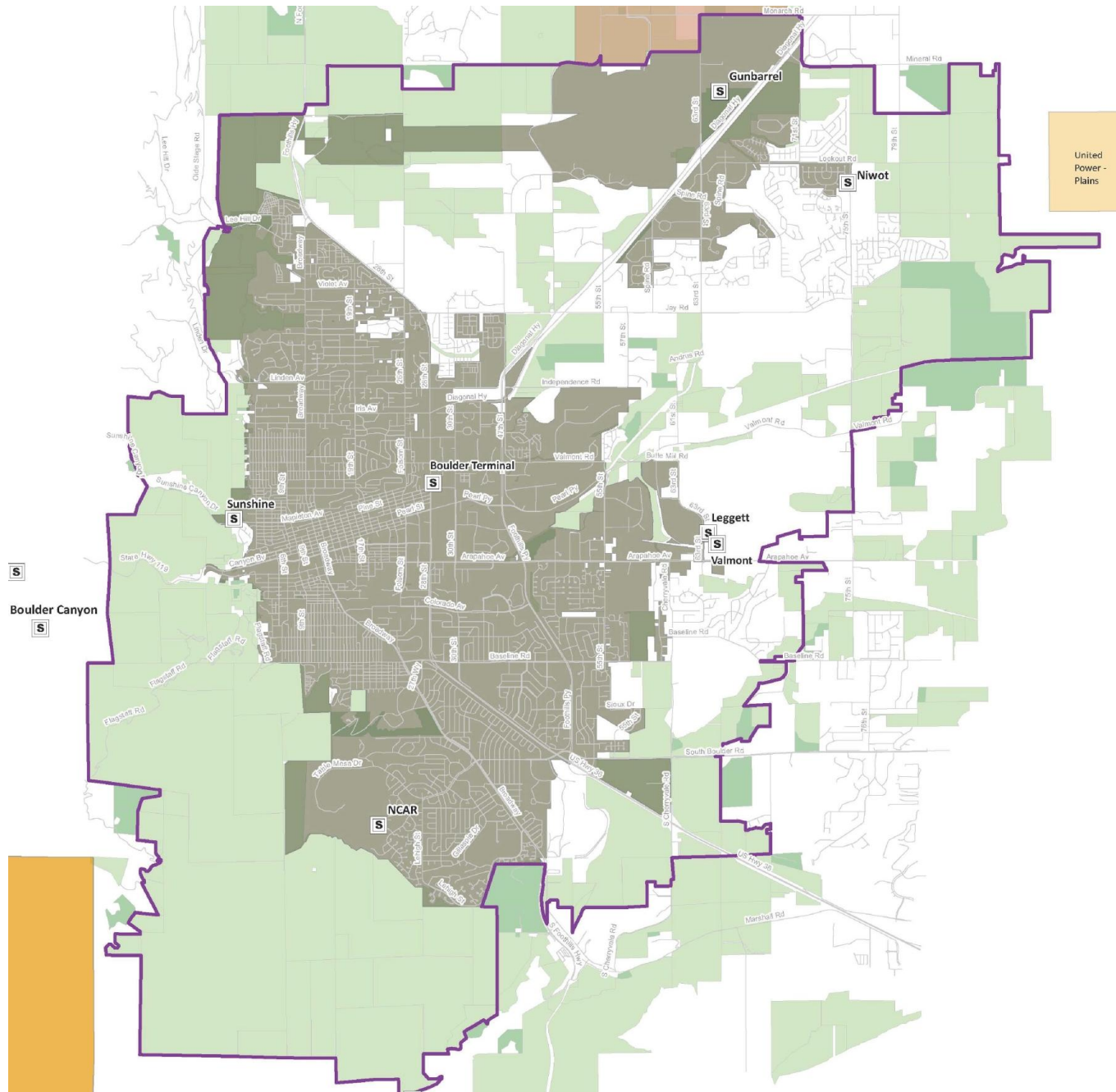
# PUC Application

- The application filed by the city with the Colorado Public Utilities Commission seeks approval of the transfer of assets currently owned by Xcel Energy.
- These assets are necessary for the City of Boulder to operate a city-owned electric utility.

# PUC Application

In addition to this approval, the city is seeking the following:

- Approval of Boulder Light and Power’s interconnection plan, which is designed to ensure the continuation of reliable and safe service
- Approval of the city-owned utility’s plan to gradually depart from Xcel’s power supply
- An order that Xcel work with the city to create an agreement that will allow non-city customers to continue to be served by Xcel and a detailed transition plan that ensures a seamless implementation of Boulder Light and Power





# What we've heard

Questions about :

- Reliability
- Having a vote in city elections
- Who would be responsible for infrastructure and repair
- “Wheeling” of power

# Out-of-City Customers

- Boulder does not plan to serve out-of-city customers
- Boulder's acquisition plan includes some electric assets located outside the city limits which serve both city and county customers
- Xcel can provide service to their customers over city owned lines (wheeling) and pay the city for use of those lines
- It is common practice in the electric industry to "wheel" power

# How will out-of-city customers be served?

- Customers will still be served and billed by Xcel and call Xcel for service and questions – just like today
- Boulder will work with Xcel to coordinate response
- Xcel will reimburse city for use of lines through a tariff, a standard formula rate used by utilities to charge for use of another's lines
- Tariff will be cost-based related only to the costs of the portion of the system serving out of city
- Xcel's rates should decrease for the value of assets and operating costs which are transferred to the city

**The energy utility market is changing.  
This shift is necessary and inevitable.**

*Causes include:*

- Changing needs and demographics
- Deregulation and competition
- Technology
- Public pressure

**Current Business  
Model**



**Desired Business  
Model**

# What We Have Learned

*88 new public power utilities have formed in the U.S. in the last 40 years.*

- Formed in half the U.S. states
- The largest serves over 1 million customers; the smallest serves just a few
- In the last 10 years, 17 new POU's have formed

*Colorado has 29 public power utilities*

## ***What we learned from other POU's***

- *Denton Municipal Electric, TX, est. 1905*
  - Economic Development – jobs created through utility, business development to improve efficiency and renewable energy
- *Jefferson County, WA, est. 2008*
  - Decreased CO<sub>2</sub> Emissions – Over time, rates projected to be lower than IOUs with decreased carbon emissions

## ***What we learned from other POU's***

### ***– Winter Park, FL, est. 2005***

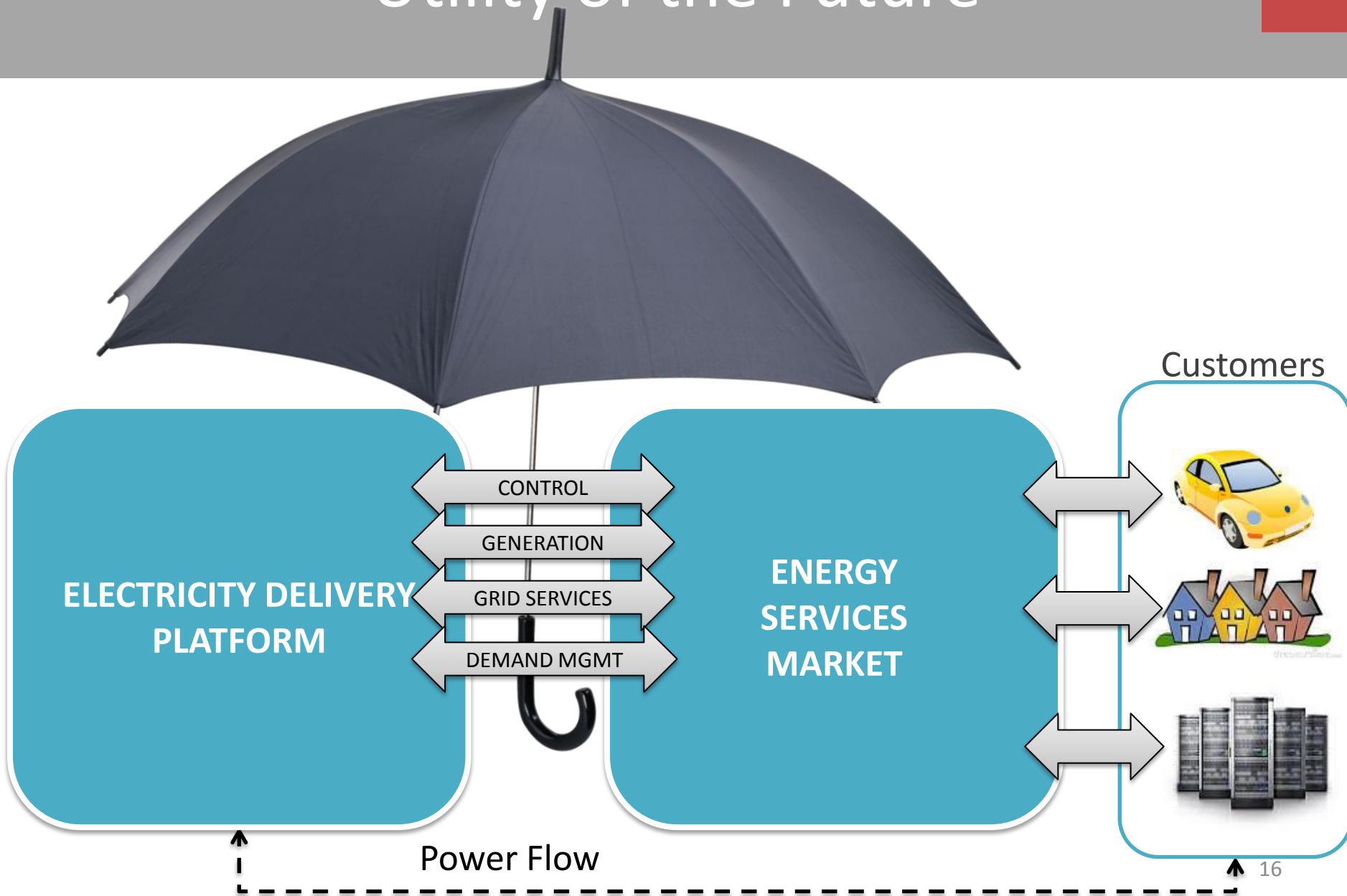
- Increased Reliability – POU formed due to outages with IOU; strong program to improve reliability includes putting significant portion of power lines underground

### ***– Fort Collins, CO, est. 1887***

- Resilience and Reliability – One of the most reliable distribution systems in the country; 99% of power lines underground

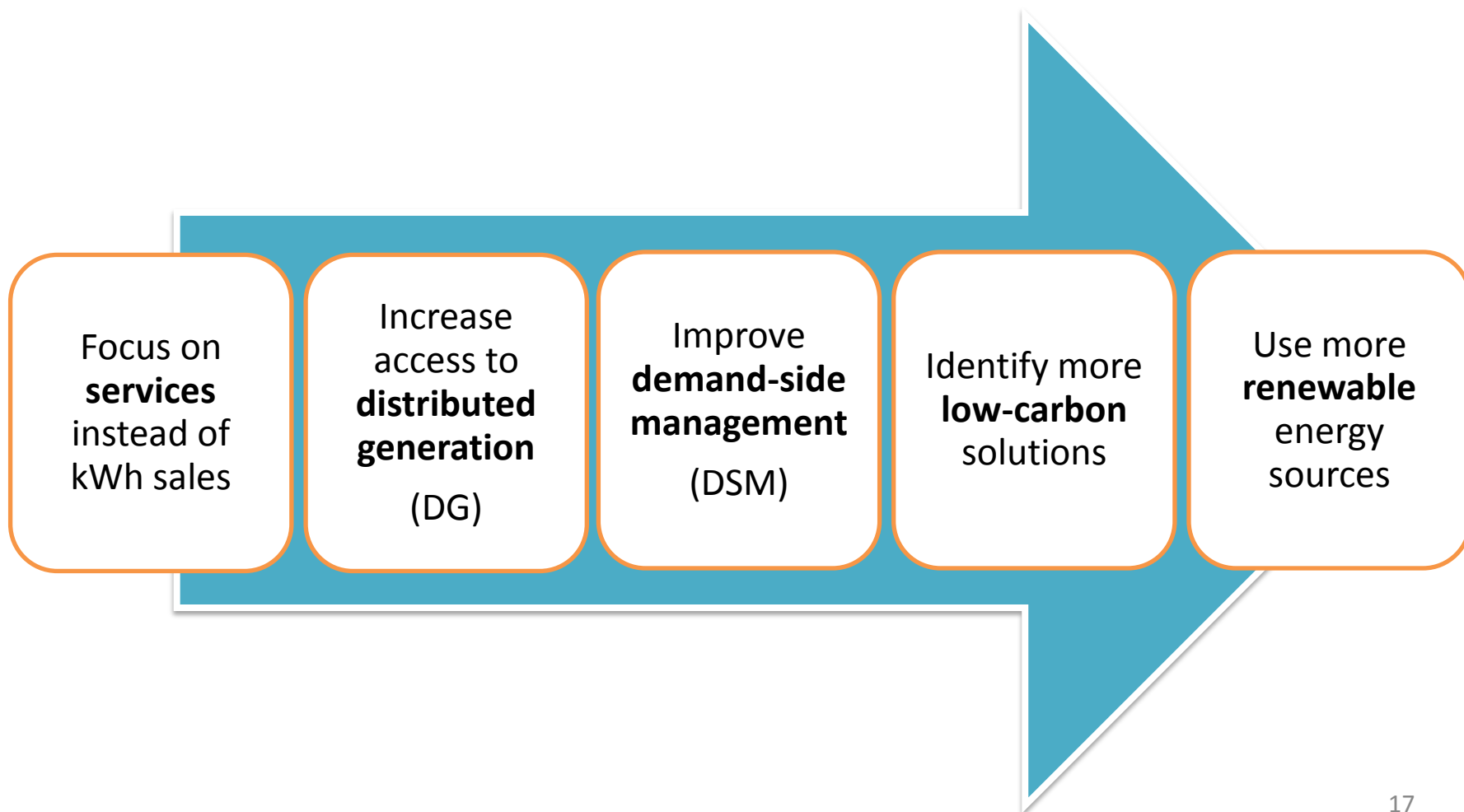
# Utility of the Future

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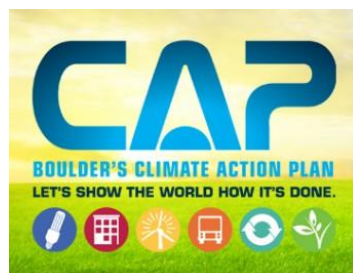




# Boulder's Vision of an Energy Future



# What we can do now



## Rating & Reporting and Energy Efficiency for Commercial & Industrial (C&I) Building Owners: *Proposed Requirements*



### Community Power Partnership

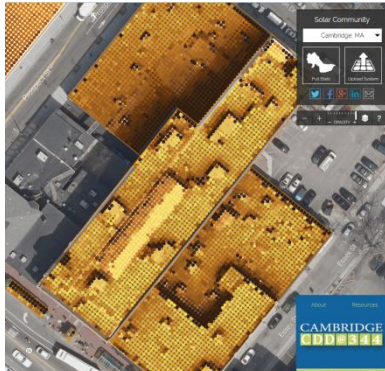


Be informed.  
Track your resource use.  
**Contribute to innovative community solutions.**



# What we're going to do

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Targeted Solar Outreach



Carbon Offset Fund



DOE Nanogrid Pilot



Innovation Studies

# Status and Next Steps

1. Evaluating legal and policy reform
2. PUC filing
3. Transition Plan
4. Condemnation

# Examples of Needed Policy Reform

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**1** Peer-to-Peer Sharing of Electricity

Community Choice Aggregation

**2**

**3** Energy Data Center

Alternative Energy Efficiency Management

**4**

**5** Remove the 120% Cap

Performance-Based Rates & Grid Modernization

**6**

**7** State Carbon Tax

Promote Electric Vehicle Uptake

**8**

**9** Green Electric Resource Planning

Time-of-Use Electric Rates

21 **10**

# Contact and Learn More

Follow along at [www.BoulderEnergyFuture.com](http://www.BoulderEnergyFuture.com)

- Sign up for E-News updates and newsletter
- Use online comment form for questions, feedback or suggestions
- Follow the Local Environmental Action Division (LEAD) on Twitter!  
**@boulderlead**

Send an email to the staff team at

[EnergyFuture@BoulderColorado.gov](mailto:EnergyFuture@BoulderColorado.gov)

Contact **Heather Bailey** with questions/comments

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